

Work Order ID 57660

April 13, 2010 3:11:03 PM



Page 1

Item ID: D6008-132

Accept



Setup Start



Revision ID:

Stop



Item Name: Crosstube extrusion

Start Date: 4/13/10 Start Qty: 5.00



Cust Item ID:

Required Date: 4/13/10 Req'd Qty: 5.00



Customer:

Reference:

Approvals: Process Plan: W Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
----------	--------------

D6008	Rev A
-------	-------

100

0.00



PURCHASING

Purchasing

Memo

0.00

Purchasing

Issue P/O: 11650
HONE PER NCR 083

CY 10/4/14 (5)

110

0.00



Receive & Inspect for Damage & Mat'l Certs

Packaging

Memo

0.00

Packaging

Ensure material certification is attached

P 10/4/14 (5)

120

0.00



QC6- Inspect dimensions to drawing

QC

Memo

0.00

Quality Control

Ensure Material certification comply to Dwg D6005

P 10.04.16
REF DS EMAIL

Dart Aerospace Ltd

W/O: 57660		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
10-04-16	121	CHEMICAL CONVERSION COAT PER QSI COS 4.1	AWM	10-4-19	5		S 10/04/19
	122	QC 3 inspect chemical co coat	S	10/04/19	45		S 10/04/19

Part No: D6008-132 PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Page 2

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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

Identify as per dwg & Stock Location: L-6

0.00



Packaging

Memo

0.00

Packaging

RE-IDENTIFY USING NEW B/N

5

--

AWM 10-4-19

140

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/04/20 JG

MK
10-4-20

Picklist Print

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Page 1

Work Order ID: 57660



Parent Item: D6008-132



Parent Item Name: Crosstube extrusion



Start Date: 4/13/10

Required Date: 4/13/10

Comments: IPP Rev:A New Issue 07-06-18 JLM

Start Qty: 5.00

Required Qty: 5.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D6008-132 		Manufactured	No				Each	5.0000	5.0000			
Crosstube extrusion												

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

LG

50892

5

5

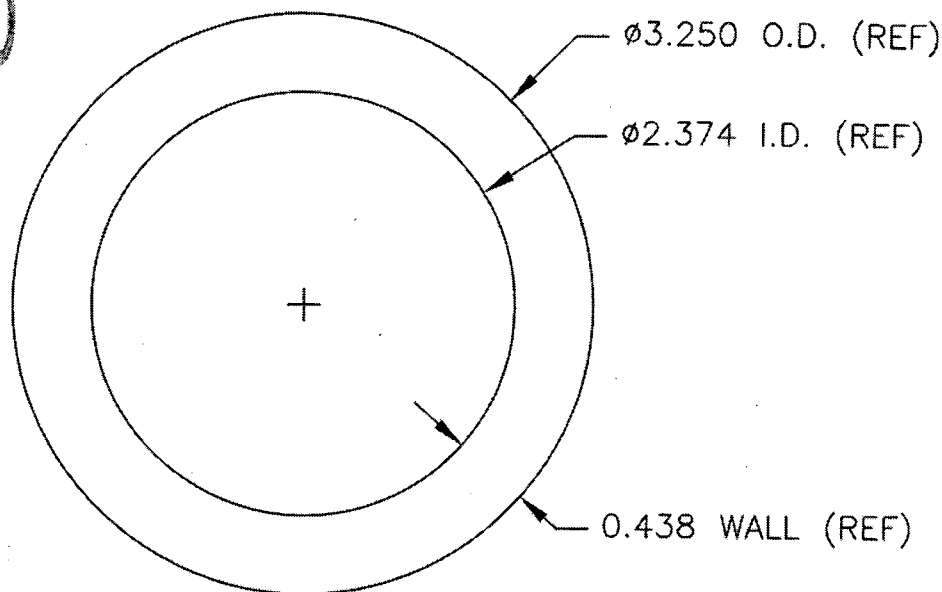
MF 10-4-20



DESIGN <i>CP</i>	DRAWN BY <i>CP</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D6008	REV. A SHEET 1 OF 1
DATE 00.11.17		TITLE CROSSTUBE MATERIAL SCALE 1:1	
A	00.11.17	NEW ISSUE	

SPECIFICATION CONTROL DRAWING

RELEASED
00.11.24 *[Signature]*



NOTES

- 1) D6008-XXX CROSSTUBE
LENGTH

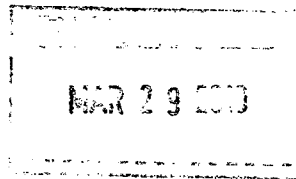
WHERE XXX IS LENGTH IN INCHES
EG. 180" LONG TUBE: D6008-180

CL 10/4/12
W10: 57660

- 2) MATERIAL: 3.250 OD x 0.438 WALL 7075-T6/T6511 (WW-T-700/7 OR QQ-A-225/9 OR QQ-A-200/11) SEAMLESS ALUMINUM TUBE.
MINIMUM ULTIMATE TENSILE STRENGTH = 77 ksi
MINIMUM YIELD TENSILE STRENGTH = 66 ksi
- 3) TOLERANCES ARE PER ASTM B210 AS FOLLOWS:
O.D.: ± 0.008 MEAN (± 0.016 INCLUDING OVALITY)
WALL: ± 0.020 MEAN (± 0.044 INCLUDING ECCENTRICITY)
LENGTH: XXX $+0.125/-0.000$
STRAIGHTNESS: 0.010" DEVIATION / 12" LENGTH
- 4) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 5) CHEMICAL CONVERSION COAT PER DART QSI 005 4.1

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Aluminiumwerk Unna AG Uelzener Weg 36 D-59425 Unna

Dart Aerospace Ltd.
1270 Aberdeen Street
CDN K6A 1K7 Hawkesbury
ON
Kandada

Aluminiumwerk Unna AG
Uelzener Weg 36 * D-59425 Unna
Postfach 11 46 * D-59401 Unna
fon +49 (0) 2303 206 0
fax +49 (0) 2303 206 116
info@alunnatubes.com
www.alunnatubes.com

page: 1
date: 03.22.2010
account: 40980

Proforma Invoice 49359a

your PO no.: PO10125
dated: 7.24.2009
your ref.:

order confirmation: 33209

contact: Petra Eisenblaetter
phone: + (303) 755 5672
fax: + (303) 755 5936

representative: Claus J. Better
your Vat no.:
our VAT no.: DE177869055
Tax code: 316/5702/0535

seamless extruded aluminium tubes, alloy EN AW-7075, temper T 6511,
according to ASM-QQ-A-200/11, tariff no. 76082081

size	quantity
82.55 mm OD x 11.13 mm WT	5 pcs.
69.85 mm OD x 7.95 mm WT	5 pcs.

invoice amount:

50.00 \$

Commerzbank AG, Unna
Konto-Nr. 102 56 00 * BLZ 443 400 37
S.W.I.F.T. - Code: COBADE FF 443
IBAN: DE90 4434 0037 01025600 00

Sitz der Gesellschaft: Unna
Amtsgericht Hamm, HRB 3045

Vorstand: Volker Findeisen (Vors.), Thomas Wiese
Vorsitzende des Aufsichtsrats: Irene Wiese

Aluminiumwerk Unna AG Uelzener Weg 36 D-59425 Unna

Aluminiumwerk Unna AG
Uelzener Weg 36 * D-59425 Unna
Postfach 11 46 * D-59401 Unna
fon +49 (0) 2303 206 0
fax +49 (0) 2303 206 116
info@alunnatubes.com
www.alunnatubes.com

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CDN K6A 1K7 Hawkesbury
ON
Kandada

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S.W.I.F.T. - Code: COBADE FF 443
IBAN: DE90 4434 0037 01025600 00

Sitz der Gesellschaft: Unna
Amtsgericht Hamm, HRB 3045

Vorstand: Volker Findeisen (Vors.), Thomas Wiese
Vorsitzende des Aufsichtsrats: Irene Wiese



Boxmarking:

We hereby declare that the wooden packing material are totally free from bark and apparently

ree from live plant pests

S:\VERSAND\USA_Packliste\33209_1+2

Chris Provencal

From: David Shepherd [dshepherd@dartaero.com]

Sent: April 15, 2010 6:40 PM

To: 'Chris Provencal'

Subject: RE: NCR D6008

Hi Chris,

The marks appear to be at 45 degrees, are smooth, and are on the inside of the tube. The tubes are low gear, not high gear, and are therefore less susceptible to cracking or fatigue. Therefore, I believe these tubes are acceptable.

Regards,
David

From: Chris Provencal [mailto:cprovencal@dartaero.com]

Sent: Thursday, April 15, 2010 12:23 PM

To: 'David Shepherd'

Subject: RE: NCR D6008

Further, there are also some D6019 tubes that were honed (used on -105 / -107 xubtes), the D6008 is used on the -207.

From: Chris Provencal [mailto:cprovencal@dartaero.com]

Sent: April 15, 2010 2:01 PM

To: 'David Shepherd'

Cc: 'Mike Petsche'

Subject: NCR D6008

A while ago, we got a bunch of D6008 xtube extrusion that had little bumps all down the inner diameter of the tube. I believe you were made aware of that. They sent the tubes back to Alunna who had the tubes honed. We now have them back and you can see honing marks on the inside. The surface itself is very smooth and you can't feel the marks at all. However it doesn't meet the requirement of no circumferential grind marks. Photos attached.

-David

No virus found in this incoming message.

Checked by AVG - www.avg.com

Version: 8.5.437 / Virus Database: 271.1.1/2812 - Release Date: 04/15/10 06:31:00